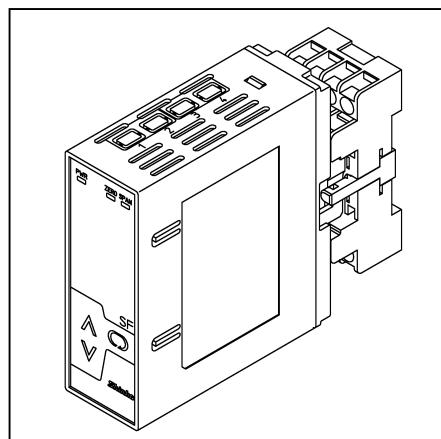
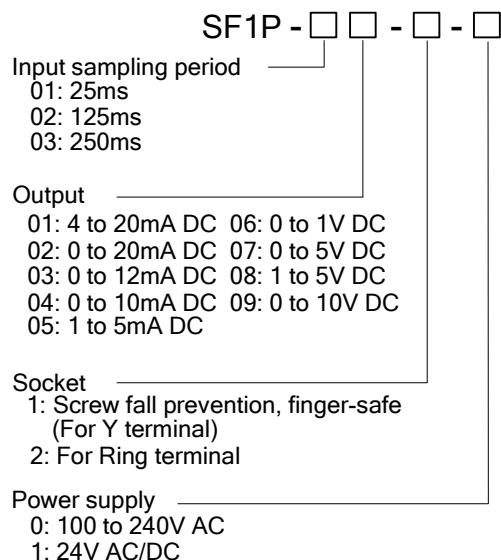


1ch Potentiometer Transmitter

Model: **SF1P**

■ **Model**



■ **Performance**

Accuracy: Within $\pm 0.2\%$ of input span (at 23°C of ambient temperature)
 Input sampling period: 25ms, 125ms, 250ms (Must be specified)

Response time:
 65ms (typ.)(0→90%)(Input sampling period: 25ms)
 225ms (typ.)(0→90%)(Input sampling period: 125ms)
 425ms (typ.)(0→90%)(Input sampling period: 250ms)
 Temperature coefficient: $\pm 0.015\%/^{\circ}\text{C}$ or less
 Insulation resistance: 10M Ω or more, at 500V DC (Input - Output - Power)
 Dielectric strength: 2.0kV AC for 1 minute (Input - Output - Power)

■ **How to Order**

Specify a model.
 (e.g.) SF1P-0101-1-0
 Default value

Output	4 to 20mA DC
Input sampling period	25ms

■ **Input Specifications**

Potentiometer

Total resistance: 100 Ω to 10k Ω
 Excitation: 1.0V DC

■ **Output Specifications**

DC Current

Output range	Allowable load resistance	Zero adjustment range	Span adjustment range
4 to 20mA DC	700 Ω or less	-5 to 5%	95 to 105%
0 to 20mA DC	700 Ω or less	0 to 5%	95 to 105%
0 to 12mA DC	1.2k Ω or less	0 to 5%	95 to 105%
0 to 10mA DC	1.2k Ω or less	0 to 5%	95 to 105%
1 to 5mA DC	2.4k Ω or less	-5 to 5%	95 to 105%

DC Voltage

Output range	Allowable load resistance	Zero adjustment range	Span adjustment range
0 to 1V DC	100 Ω or more	0 to 5%	95 to 105%
0 to 5V DC	500 Ω or more	0 to 5%	95 to 105%
1 to 5V DC	500 Ω or more	-5 to 5%	95 to 105%
0 to 10V DC	1k Ω or more	0 to 5%	95 to 105%

■ **General Structure**

Case: Flame-resistant resin Color: Light gray
 Front panel: Membrane sheet

Adjustment: Using the front keypad

- Press the MODE Key. The ZERO indicator becomes lit. The unit moves to the Potentiometer input ZERO adjustment mode.
- Set the potentiometer to any position, and press the DOWN Key once.
 The automatic adjustment will be performed, then the ZERO position will be registered.
 Press the MODE Key.
 The SPAN indicator becomes lit, and the unit moves to the Potentiometer input SPAN adjustment mode.
- Set the potentiometer to any position (larger than the ZERO position) of MAX side, and press the UP Key once. The automatic adjustment will be performed, then the Span position will be registered.
- Pressing the MODE Key returns to Step (1).
 If the MODE Key is pressed for approx 3 sec, or if no operation occurs for approx. 30 sec, the unit will revert to the RUN mode.

Indication:

PWR indicator (Green):

Lit when power is turned ON.

Flashes in 0.5 second cycles if non-volatile memory errors occur.

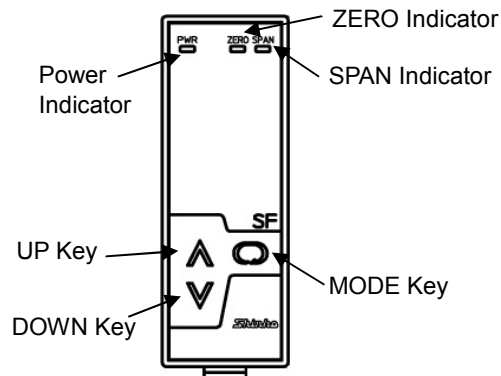
Flashes in 0.25 second cycles if input errors occur.

ZERO indicator (Yellow):

Lit in the Output ZERO adjustment mode.

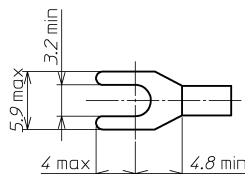
SPAN indicator (Yellow):

Lit in the Output SPAN adjustment mode.

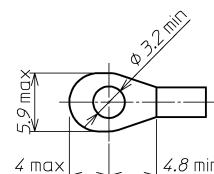


■ Solderless Terminals

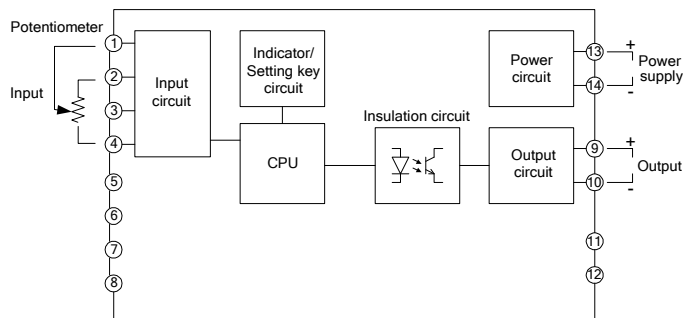
Y Terminal



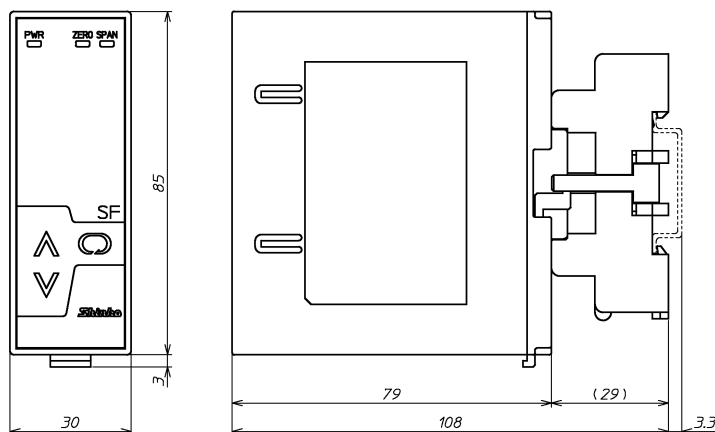
Ring Terminal



■ Circuit Configuration, Terminal Arrangement



■ External Dimensions (Scale: mm)



■ Installation Specifications

Power supply: 100 to 240V AC 50/60Hz
24V AC/DC 50/60Hz

Allowable voltage range: 85 to 264V AC
20 to 28V AC/DC

Power consumption: Approx. 6VA

Ambient temperature: -5 to 55°C

Ambient humidity: 35 to 85%RH (non-condensing)

Weight: Approx. 190g (including socket)

Mounting: DIN rail

Dimensions: W30 x H88 x D108mm (including socket)

■ Attached Functions

Power failure countermeasure:

The data is backed up in non-volatile IC memory.

Self diagnosis:

The CPU is monitored by a watchdog timer, and when an abnormal status is found on the CPU, the unit is switched to warm-up status turning all outputs OFF.

■ Environmental Specifications

RoHS directive compliance

■ Settings

Function keys

- (1) UP Key: Increases a numerical value.
- (2) DOWN Key: Decreases a numerical value.
- (3) MODE Key: Switches from RUN mode to the Adjustment mode, and registers the adjustment value.